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EXAMINER

SPAHN, GAY

ART UNIT PAPER NUMBER

3673

DATE MAILED: 07/28/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/649,978

Applicant(s)

NELSON, DAVID N.

Examiner

Gay Ann Spahn

Art Unit

3673

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 31 March 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-7,9-11,13-18,20 and 21 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-7,9-11,13-18,20 and 21 is/are rejected.
- 7) ☐ Claim(s) 10, 13, 20, and 21 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 26 August 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 29 December 2003:
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## **DETAILED ACTION**

### ***Response to Amendment***

The finality of the rejection of the last Office action is being withdrawn because the Office Action made final and mailed on 26 January 2005 (hereinafter referred to as "Final Office Action") does not clearly indicate how independent claims 13-18 are being rejected (i.e., whether claims 13-16 are rejected under 35 U.S.C. §102(b) as being anticipated by Bunch (U.S. Patent No. 5,655,245) as indicated on page 2, lines 13-14 of the Final Office Action, whether claims 13-18 are rejected under 35 U.S.C. §103(a) as being unpatentable over Bunch as applied to claims 1 and 2 as indicated on page 4, lines 11-13 of the Final Office Action, or whether claims 13-18 are rejected under 35 U.S.C. §103(a) as being unpatentable over Bunch as indicated on page 4, line 14 through page 5, line 21 of the Final Office Action).

It is the United States Patent and Trademark Office's (hereinafter referred to as "the Patent Office") position that claims 13-16 stand rejected under 35 U.S.C. § 102(b) as being anticipated by Bunch and claims 17 and 18 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Bunch. However, in order to clarify the record, the finality of the Final Office Action is being withdrawn and the present non-final Office Action is being issued.

Further, the examiner notes that the Final Office Action erroneously rejected claim 11 under 35 U.S.C. § 102(b) as being anticipated by Bunch when the claim on which it directly depended (i.e., dependent claim 10) had been rejected under 35 U.S.C.

§ 103(a) as being unpatentable over Bunch. Thus, since claim 11 should have been rejected under 35 U.S.C. § 103(a) as being unpatentable over Bunch and not under 35 U.S.C. §102(b) as being anticipated by Bunch, this is another reason why the Patent Office is withdrawing the finality of the Final Office Action and issuing the present non-final Office Action.

The amendment filed with a certificate of mailing one 28 March 2005 is objected to under 35 U.S.C. 132(a) because it introduces new matter into the disclosure. 35 U.S.C. 132(a) states that no amendment shall introduce new matter into the disclosure of the invention. The added material which is not supported by the original disclosure is as follows: the recitation of “consist essentially of...” (line 2 of new claim 21) and “consisting essentially of...” (line 3 of new claim 21).

More particularly, the specification as originally filed does not provide support for the newly added recitation of “the step of providing a cleaning device consists essentially of...” as now appears in newly added claim 21. Nor had the specification originally provided support for the newly added recitation of “providing a conduit system consisting essentially of...” as now appears in newly added claim 21. Nothing in the originally filed disclosure would lend one of ordinary skill in the art to construe that certain materials or steps would materially affect the basic and novel characteristic(s) of the disclosed and claimed invention.

Applicant is required to cancel the new matter in the reply to this Office Action.

***Information Disclosure Statement***

The Information Disclosure Statement filed on 29 December 2003 has an incorrect Patent No. on it which Examiner Saldano should not have considered or initialed. Patent No. 4,787,206, listed on the fifth line of the U.S. Patent Documents section of the Information Disclosure Statement, is not a Patent to Lynch issued on 10 January 1989. Rather, Patent No. 4,787,206 is a Patent to Hans D. Fabrowsky issued on 29 November 1988 for a "Hydraulic Pressure Transducer" and is non-analogous art in class 60 entitled "Power Plants", subclass 560 entitled "Power Fluid Also Fed Into A Separate Expansible Chamber Directly Driving Output Means". Therefore, the Information Disclosure Statement is being resent to you with U.S. Patent No. 4,787,206 being lined through as not being considered and the enclosed copy of the Information Disclosure Statement supercedes the copy of the Information Disclosure Statement sent with the Office Action mailed on 08 June 2004 (i.e., part of Paper No. 05252004). It is believed that U.S. Patent No. 4,787,206 was a typographical error and that Applicant actually meant to list U.S. Patent No. 4,797,206 issued on 10 January 1989 to Lynch and if this is the case, then Applicant should resubmit U.S. Patent No. 4,797,206 to the USPTO on a new Information Disclosure Statement if he wants it to be considered.

***Drawings***

The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference characters not mentioned in the

Art Unit: 3673

description: reference numeral "107" shown in Fig. 2. Corrected drawing sheets in compliance with 37 CFR 1.121(d), or amendment to the specification to add the reference character in the description in compliance with 37 CFR 1.121(b) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

The drawings are objected to because:

(1) they fail to comply with 37 C.F.R. §1.84 entitled "Standards for Drawings", subsection (r) entitled "Arrow". In pertinent part, 37 C.F.R. § 1.84(r) reads as follows:

Arrows may be used at the ends of lines, provided that their meaning is clear, as follows:

- (1) On a lead line, a freestanding arrow to indicate the entire section towards which it points;
- (2) On a lead line, an arrow touching a line to indicate the surface shown by the line looking along the direction of the arrow; or
- (3) To show the direction of movement.

Thus, the examiner does not understand the arrowheads at the end of lead lines leading from: reference numerals 104, 105b, 110, 112, 116, 120, 120a, and 120b in Fig. 1; reference numerals 104, 106, 107, 110, 112, 114, 116, 118, 120, 120a, 120b,

and 126 in Fig. 2; reference numerals 102, 106, 104, 108, 109, 110, 112, 114, 116, 118, 120, 103 in Fig. 3; and reference numerals 120a and 120 b in Fig. 4.

(2) they fail to comply with 37 C.F.R. §1.84(h)(3) entitled "Sectional Views" which states in pertinent part that "[t]he plane upon which a sectional view is taken should be indicated on the view from which the section is cut by a broken line" and "[t]he ends of the broken line should be designated by Arabic or Roman numerals corresponding to the view number of the sectional view, and should have arrows to indicate the direction of sight".

Thus, the letter "B" in Figure 2 should be changed to either --4-- or --IV-- and the section line "A-A" in Fig. 2 should be changed to either --3-3-- or --III-III--.

(3) In Figure 1, handle 112 appears to extend outwardly past the outer diameter of the intake portion 106 and skirts 120, but handle 12 does not stick outwardly past the outer diameter of intake portion 106 and skirts 120 in the front view shown in Fig. 2. Why? Shouldn't handle 112 be shown in Figure 2 as extending farther to the right than the outer diameter of the intake portion 106 and the skirt 120?

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate

Art Unit: 3673

changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

### ***Specification***

The disclosure is objected to because of the following informalities:

(1) page 3, line 2 of paragraph no. [0009], "direction A-A" should be changed to either --line 3-3-- or --line III-III--;

(2) page 3, line 1 of paragraph no. [00010], "B" should be either --4-- or --IV--;

(3) page 3, line 6 of paragraph no. [00012], "104with" should be --104 with-- (i.e., there should be a space between the reference numeral "104" and the word "with"); and

(4) page 3, lines 7-8 of paragraph no. [00012], "with respective inlet and outlet portions 105a and 105b, respectively" is grammatically incorrect (i.e., either the word "respective" or the word "respectively" should be deleted).

Appropriate correction is required.



***Claim Objections***

Claims 10, 13, 20, and 21 are objected to because of the following informalities:

(1) claim 10, lines 1-2, recite that “the outlet portion comprises an elbow shaped conduit”, but in claim 1 (on which claim 10 indirectly depends), line 4 recites “the outlet portion including a conduit”. Is the conduit of claim 1 the same as the elbow shaped conduit of claim 10? If it is, the examiner suggests amending claim 10 to read --the outlet portion comprises the conduit which is elbow shaped and which is monolithically formed in one piece with the head assembly--.

(2) claim 13, line 19, it is believed that the word “landscape” after the word “surface” is a typographical error and should be deleted.

(3) claim 20, line 3, the recitation of “the inlet portion” lacks antecedent basis and it is not clear if the word “inlet” should be change to --intake-- or it “the inlet portion” should be changed to --an inlet portion-- (i.e., are you referencing intake portion 106 OR inlet portion 105a of conduit 105?).

(4) claim 21, line 7, the recitation of “the inlet portion” lacks antecedent basis and it is not clear if the word “inlet” should be change to --intake-- or it “the inlet portion” should be changed to --an inlet portion-- (i.e., are you referencing intake portion 106 OR inlet portion 105a of conduit 105?).

Appropriate correction is required.

***Claim Rejections - 35 USC § 112***

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claim 21 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

The specification as originally filed does not provide support for the newly added recitation of “the step of providing a cleaning device consists essentially of...” as now appears in newly added claim 21. Nor had the specification originally provided support for the newly added recitation of “providing a conduit system consisting essentially of...” as now appears in newly added claim 21. Nothing in the originally filed disclosure would lend one of ordinary skill in the art to construe that certain materials or steps would materially affect the basic and novel characteristic(s) of the disclosed and claimed invention.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

Art Unit: 3673

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-3, 7, 9, 13-16, 20, and 21 are rejected under 35 U.S.C. 102(b) as being anticipated by Bunch (U.S. Patent No. 5,655,245).

As to claim 1, Bunch discloses a device (10) for cleaning a landscape surface that is directly exposed to the atmosphere, comprising

a. a conduit system (20, 18, 34, 62) with an intake portion (20/18) and an outlet portion (34) in direct fluid communication with each other; the outlet portion (34) including a conduit that has a smaller inner diameter than the inner diameter of the intake portion (20/18), the outlet portion (34) configured for attachment to a vacuum source (see col. 2, lines 56-57, wherein it is disclosed that "an outlet 34 therein for connection to a suction line of a pump"), the intake portion (20/18) having a distal end (36) with an intake opening (38) through which landscape material (single pieces of gravel and gravel clusters such as 66) can be drawn into the intake portion (20/18) from the surface of the landscape (14), and the intake portion (20/18) has a substantially constant cross section area from the intake opening (38) to the outlet portion (34),

b. the conduit system (20, 18, 34, 62) being configured to

i. enable the intake portion (20/18) to be held in a downward orientation toward the surface of the landscape with the intake opening (38) disposed against the surface of the landscape (14),

ii. allow atmospheric air that is about the landscape surface, landscape rock, dirt and debris to be drawn into the intake portion (20/18) and transmitted through the outlet portion (34) while retarding

transmission of landscape rock from the intake portion (20/18) through the outlet portion (34) (see 68 in Fig. 1), and

iii. provide a pressure state within the intake portion (20/18) such that when the intake portion (20/18) is lifted off the surface of the landscape, the landscape rock in the intake portion will be deposited on the surface of the landscape (see col. 2, lines 51-53 and col. 4, lines 24-27, wherein it is disclosed that when the operator lifts the gravel cleaner (10) from the pond bottom, gravel in the lower and upper housings (20/18) will fall back through the lower housing (20)).

With respect to the recitation of a device "for cleaning a landscape surface that is directly exposed to the atmosphere" in lines 1-2 of independent claim 1, the language of "for cleaning a landscape surface that is directly exposed to the atmosphere" is a statement of intended use. As such, all the Patent Office must do is show that any reference they apply is capable of performing that intended use. It is the examiner's position that the Bunch reference is capable of performing the intended use of "cleaning a landscape surface that is directly exposed to the atmosphere". The examiner contends that even though Bunch discloses that it is an apparatus for removing debris from gravel in a fish pond, it could perform the function of cleaning a landscape surface if it were directly exposed to the atmosphere (i.e., it does not have to be in an aquatic setting, but would work equally as well on land). Applicant argues that there is no evidence that one of ordinary skill would be motivated to use Bunch to clean a landscape surface, but the examiner refers Applicant to col. 4, lines 54-55 wherein

Bunch states that "the fluid is preferably water, but can be air" and thus, it is clear that Bunch anticipated that his device could be used on land as well as in water.

With respect to the recitation of "the intake portion having a substantially constant cross section area from the intake opening to the outlet portion" in lines 8-9 of independent claim 1, it is noted that the term "substantially constant cross section area" is a relative term and as such, it is the examiner's position that even though the Bunch reference shows a slight widening of the cross-sectional area from the lower housing (20) to the upper housing (18), the structure of Bunch is deemed to read on the language of "substantially constant cross-section area". Furthermore, no criticality has been shown as to why the cross-sectional area from the intake opening to the outlet portion must be "substantially constant" when it appears that a cross-section with a slight widening from the intake opening to the outlet portion such as in the Bunch device functions just as well.

With respect to the recitation that the conduit system is configured to "enable the intake portion to be held in a downward orientation toward the surface of the landscape with the intake opening disposed against the surface of the landscape" in lines 10-12 of independent claim 1, it is the examiner's position that Bunch clearly meets this language. However, the examiner also notes that in col. 4, lines 57-59, Bunch states that "the bottom end of the gravel cleaner need not be angled or can have a different angle than depicted, whichever is more comfortable for a particular operator." Thus, Bunch contemplated being usable in a more up-and-down orientation similar to that of Applicant as shown in his Figs. 2 and 3.

With respect to the recitation that the conduit system is configured to “allow atmospheric air that is about the landscape surface, landscape rock, dirt and debris to be drawn into the intake portion and transmitted through the outlet portion while retarding transmission of landscape rock from the intake portion through the outlet portion” in lines 12-15 of independent claim 1, the examiner points Applicant’s attention to col. 4, lines 24-27 where Bunch indicates that his device allows gravel to “fall back through lower housing 20” and thus clearly retards transmission of landscape rock.

With respect to the recitation that the conduit system is configured to “provide a pressure state within the intake portion such that when the intake portion is lifted off the surface of the landscape, the landscape rock in the intake portion will be deposited on the surface of the landscape” in lines 15-17 of independent claim 1, the examiner points Applicant’s attention to col. 4, lines 24-27 where Bunch indicates that when “[t]he operator” lifts “the gravel cleaner 10 away from the pond bottom”, gravel “will fall back through lower housing 20” and thus clearly landscape rock in the intake portion is redeposited from where it came.

As to claim 2, Bunch discloses the device of in claim 1 as discussed above, and Bunch further discloses that the intake portion (20/18) extends at a predetermined angle (of zero degrees) to at least part of the outlet portion (34).

As to claim 3, Bunch discloses the device of claim 2 as discussed above, and Bunch further discloses that the angle between the intake portion (20/18) and the part of

the outlet portion (34) is not more than 135 degrees (zero degrees is not more than 135 degrees).

As to claim 7, Bunch discloses the device of claim 2 as discussed above, and Bunch also discloses that the cleaning device (10) is configured such that the intake portion (20/18) can be lifted vertically with respect to the landscape surface (14), and includes a pair of handles (48, 48 in Fig. 3) located to (i) enable the intake portion (20/18) to be oriented vertically at about 90 degrees with respect to a landscape surface (14) with the intake opening (38) disposed against the landscape surface (14), and (ii) enable the intake portion (20/18) to be lifted vertically with respect to the landscape surface (14).

Again, the examiner notes that in col. 4, lines 57-59, Bunch states that "the bottom end of the gravel cleaner need not be angled or can have a different angle than depicted, whichever is more comfortable for a particular operator." Thus, Bunch contemplated being usable in a more up-and-down orientation similar to that of Applicant as shown in his Figs. 2 and 3 so that the recitation of claim 7 is deemed to be fully met.

As to claim 13, Bunch discloses a method for cleaning a landscape surface that is directly exposed to the atmosphere of dirt and debris while enabling landscape rock to remain a part of the landscape surface (see col. 3, line 23 through col. 4, line 33 wherein the operation of the Bunch device is explained) comprising the steps of

a. providing a cleaning device (10) configured for attachment to a vacuum source (see col. 2, lines 56-57, wherein it is disclosed that “an outlet 34 therein for connection to a suction line of a pump”), the device (10) having a conduit system (20, 18, 34, 62) with an intake portion (20/18) and an outlet portion (34) in fluid communication with each other, the intake portion (20/18) having a distal end (36) with an intake opening (38) through which atmospheric air that is about the landscape surface (14), landscape material (single pieces of gravel as well as gravel clusters such as that at 66) that includes dirt and/or debris and landscape rock can be drawn into the intake portion (20/18), the intake and outlet portions (20/18, 34) configured to

i. enable the intake portion (20, 18) to be held in a downward orientation with the opening (38) disposed closely on top of the landscape surface (14) so that the vacuum in the intake portion (20/18) draws atmospheric air that is about the landscape surface (14), landscape material which includes dirt and/or debris and landscape rock from the landscape surface (14) into the intake portion (20/18), and

ii. resist landscape rock from passing through the outlet portion (34)

b. attaching the outlet portion (34) to a vacuum source (see col. 2, lines 56-57, wherein it is disclosed that “an outlet 34 therein for connection to a suction line of a pump”), providing a vacuum in the outlet portion (34) and holding the cleaning device (10) with the intake portion (20/18) extending downward to the landscape surface (14) so that the opening (38) contacts the landscape surface (14), and maintaining the intake portion (20/18) in the downward orientation with the opening (38) in contact with the



Art Unit: 3673

landscape surface (14) for a period sufficient to draw air that is about the landscape surface, dirt and/or debris and some landscape rock from the landscape surface (14) into the intake portion (20/18), and

c. lifting the intake portion (20/18) off the landscape surface (14) in a manner that allows the pressure state in the conduit system (20, 18, 34, 62) to cause landscape rock (at 68 in Fig. 1) in the intake portion (20/18) to be redeposited in situ on the landscape surface (14).

With respect to the recitation of a device “for cleaning a landscape surface that is directly exposed to the atmosphere of dirt and debris while enabling landscape rock to remain a part of the landscape surface” in lines 1-3 of independent claim 13, the language of “for cleaning a landscape surface that is directly exposed to the atmosphere of dirt and debris while enabling landscape rock to remain a part of the landscape surface” is a statement of intended use. As such, all the Patent Office must do is show that any reference they apply is capable of performing that intended use. It is the examiner’s position that the Bunch reference is capable of performing the intended use of “cleaning a landscape surface that is directly exposed to the atmosphere”. The examiner contends that even though Bunch discloses that it is an apparatus for removing debris from gravel in a fish pond, it could perform the function of cleaning a landscape surface if it were directly exposed to the atmosphere (i.e., it does not have to be in an aquatic setting, but would work equally as well on land). Applicant argues that there is no evidence that one of ordinary skill would be motivated to use Bunch to clean a landscape surface, but the examiner refers Applicant to col. 4, lines

54-55 wherein Bunch states that “the fluid is preferably water, but can be air” and thus, it is clear that Bunch anticipated that his device could be used on land as well as in water.

With respect to the recitation that the conduit system is configured to “enable the intake portion to be held in a downward orientation with the opening disposed closely on top of the landscape surface so that the vacuum in the intake portion draws atmospheric air that is about the landscape surface, landscape material which includes dirt and/or debris and landscape rock from the landscape surface into the intake portion” in lines 8-12 of independent claim 13, it is the examiner’s position that Bunch clearly meets this language. However, the examiner also notes that in col. 4, lines 57-59, Bunch states that “the bottom end of the gravel cleaner need not be angled or can have a different angle than depicted, whichever is more comfortable for a particular operator.” Thus, Bunch contemplated being usable in a more up-and-down orientation similar to that of Applicant as shown in his Figs. 2 and 3.

With respect to the recitation that the conduit system is configured to “resist landscape rock from passing through the outlet portion” in line 12 of independent claim 13, the examiner points Applicant’s attention to col. 4, lines 24-27 where Bunch indicates that his device allows gravel to “fall back through lower housing 20” and thus clearly prevents landscape rock from passing through the outlet portion (34).

With respect to the recitation that the conduit system is configured to “provide a pressure state within the intake portion such that when the intake portion is lifted off the surface of the landscape, the landscape rock in the intake portion will be deposited on

Art Unit: 3673

the surface of the landscape”, the examiner points Applicant’s attention to col. 4, lines 24-27 where Bunch indicates that when “[t]he operator” lifts “the gravel cleaner 10 away from the pond bottom”, gravel “will fall back through lower housing 20” and thus clearly landscape rock in the intake portion is redeposited from where it came.

With respect to the recitation of “holding the cleaning device with the intake portion extending downward to the landscape surface so that the opening contacts the landscape surface, and maintaining the intake portion in the downward orientation with the opening in contact with the landscape surface for a period sufficient to draw air that is about the landscape surface, dirt and/or debris and some landscape rock from the landscape surface into the intake portion” in lines 13-18 of independent claim 13, the examiner deems Bunch to read on this language. However, the examiner also notes that in col. 4, lines 57-59, Bunch states that “the bottom end of the gravel cleaner need not be angled or can have a different angle than depicted, whichever is more comfortable for a particular operator” and thus, it is clear that Bunch contemplated being usable in a more up-and-down orientation similar to that of Applicant as shown in his Figs. 2 and 3 so that the recitation of independent claim 13 is deemed to be fully met.

With respect to the recitation of “lifting the intake portion off the landscape surface in a manner that allows the pressure state in the conduit system to cause landscape rock in the intake portion to be redeposited in situ on the landscape surface” in lines 18-20 of independent claim 13, the examiner notes that Bunch clearly reads on this language by the disclosure at col. 4, lines 25-28.

As to claim 14, Bunch discloses the method of claim 13 as discussed above, and Bunch further discloses that the intake portion (20/18) is lifted vertically off the landscape surface (14).

Please note that in col. 4, lines 57-59, Bunch states that “the bottom end of the gravel cleaner need not be angled or can have a different angle than depicted, whichever is more comfortable for a particular operator.” Thus, Bunch contemplated being usable in a more up-and-down orientation similar to that of Applicant as shown in his Figs. 2 and 3 so that the recitation of claim 14 is deemed to be fully met.

As to claim 15, Bunch discloses the method of claim 14 as discussed above, and Bunch also discloses that the intake portion (20/18) is disposed at a predetermined angle (of zero degrees) to at least part of the outlet portion (34), and the outlet portion (34) comprises a conduit with an inner diameter that is smaller than the inner diameter of the intake portion (20/18).

As to claim 16, Bunch discloses the method of claim 13 as discussed above, and Bunch also discloses that the intake portion (20/18) is disposed at a predetermined angle (of zero degrees) to at least part of the outlet portion (34), and the outlet portion (34) comprises a conduit with an inner diameter that is smaller than the inner diameter of the inlet portion (20/18).

As to claim 20, Bunch discloses the device of claim 1 as discussed above, and Bunch further discloses that the outlet portion (20/18) is disposed in a head assembly (30) configured for attachment to the intake portion (20/18) with the outlet portion (34) in direct fluid communication with the intake portion (20/18).

As to claim 21, Bunch discloses the method of claim 13 as discussed above, and Bunch further discloses the step of providing a cleaning device (10) which consists essentially of

a. providing a conduit system (20, 18, 34, 62) consisting essentially of an intake portion (20/18) and an outlet portion (34) in direct fluid communication with each other; the outlet portion (34) including a conduit that has a smaller inner diameter than the inner diameter of the intake portion (20/18), the outlet portion (34) disposed in a head assembly (30) configured for attachment to the intake portion (20/18) with the outlet portion (34) in direct fluid communication with the inlet portion (20/18), the outlet portion (34) configured for attachment to a vacuum source (see col. 2, lines 56-57, wherein it is disclosed that "an outlet 34 therein for connection to a suction line of a pump") and the intake portion (20/18) having a distal end (36) with an intake opening (38) through which landscape material (single pieces of gravel as well as gravel clusters as indicated at 66) can be drawn into the intake portion (20/18) from the surface of the landscape (14)

b. the conduit system (20, 18, 34, 62) being configured to

(i) enable the intake portion (20/18) to be held in a downward orientation toward the surface of the landscape (14) with the intake opening (38) disposed against the surface of the landscape (14),

(ii) allow atmospheric air from about the landscape surface, landscape rock, dirt and debris to be drawn into the intake portion (20/18) and transmitted through the outlet portion (34) while retarding transmission of landscape rock from the intake portion (20/18) through the outlet portion (34), and

(iii) provide a pressure state within the intake portion (20/18) such that when the intake portion (20/18) is lifted off the surface of the landscape (14), the landscape rock (at 68) in the intake portion (20/18) will be deposited on the surface of the landscape (14).

With respect to the recitation that the conduit system is configured to “enable the intake portion to be held in a downward orientation toward the surface of the landscape with the intake opening disposed against the surface of the landscape” in lines 11-13 of dependent claim 21, it is the examiner’s position that Bunch clearly meets this language. However, the examiner also notes that in col. 4, lines 57-59, Bunch states that “the bottom end of the gravel cleaner need not be angled or can have a different angle than depicted, whichever is more comfortable for a particular operator.” Thus, Bunch contemplated being usable in a more up-and-down orientation similar to that of Applicant as shown in his Figs. 2 and 3.

With respect to the recitation that the conduit system is configured to “allow atmospheric air from about the landscape surface, landscape rock, dirt and debris to be drawn into the intake portion and transmitted through the outlet portion while retarding transmission of landscape rock from the intake portion through the outlet portion” in

Art Unit: 3673

lines 13-16 of dependent claim 21, the examiner points Applicant's attention to col. 4, lines 24-27 where Bunch indicates that his device allows gravel to "fall back through lower housing 20" and thus clearly retards transmission of landscape rock.

With respect to the recitation that the conduit system is configured to "provide a pressure state within the intake portion such that when the intake portion is lifted off the surface of the landscape, the landscape rock in the intake portion will be deposited on the surface of the landscape" in lines 16-18 of dependent claim 21, the examiner points Applicant's attention to col. 4, lines 24-27 where Bunch indicates that when "[t]he operator" lifts "the gravel cleaner 10 away from the pond bottom", gravel "will fall back through lower housing 20" and thus clearly landscape rock in the intake portion is redeposited from where it came.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 17 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bunch (U.S. Patent No. 5,655,245).

As to claim 17, Bunch discloses the method of claim 14 as discussed above, but Bunch fails to explicitly disclose that the intake portion (20/18) is oriented at about 90 degrees to the landscape surface (14) as the atmospheric air from about the landscape

Art Unit: 3673

surface (14), dirt and/or debris and landscape rock are drawn into the intake portion (20/18).

However, in col. 4, lines 57-59, Bunch states that “the bottom end of the gravel cleaner need not be angled or can have a different angle than depicted, whichever is more comfortable for a particular operator.” Thus, Bunch contemplated his device being usable in a more up-and-down orientation similar to that of Applicant as shown in Figs. 2 and 3.

It would have been obvious to one of ordinary skill in the art to modify the gravel cleaner of Bunch to have an intake portion which is oriented at about 90 degrees to the landscape surface in order to make the gravel cleaner more comfortable to a taller operator.

As to claim 18, Bunch discloses that method of claim 17 as discussed above, and Bunch also discloses that the intake portion (20/18) is disposed at a predetermined angle (of zero degrees) to at least part of the outlet portion (34), the outlet portion (34) comprises a conduit with an inner diameter that is smaller than the inner diameter of the intake portion (20/18), and a pair of handles (48, 48) are connected with the intake portion (20/18) in a configuration that enables an operator to grasp both handles (48, 48) and manipulate the intake portion (20/18) to a position in which the intake portion (20/18) is located on the landscape surface (14) at an orientation of about 90 degrees to the landscape surface and to lift the intake portion (20/18) vertically with respect to the landscape surface (14).



Bunch fails to explicitly disclose manipulating the intake portion (20/18) to a position in which the intake portion is located on the landscape surface at an orientation of about 90 degrees to the landscape surface (14) and lifting the intake portion (20/18) vertically with respect to the landscape surface (14).

However, in col. 4, lines 57-59, Bunch states that "the bottom end of the gravel cleaner need not be angled or can have a different angle than depicted, whichever is more comfortable for a particular operator." Thus, Bunch contemplated his device being usable in a more up-and-down orientation similar to that of Applicant as shown in Figs. 2 and 3.

It would have been obvious to one of ordinary skill in the art to modify the gravel cleaner of Bunch to have an intake portion which is oriented at about 90 degrees to the landscape surface in order to make the gravel cleaner more comfortable to a taller operator.

Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bunch (U.S. Patent No. 5,655,245).

As to claim 9, Bunch discloses the device of claim 1 as discussed above, and Bunch also discloses that the intake portion (20/18) is coupled to a head assembly (30), and the outlet portion (34) is monolithically formed in one piece with the head assembly (30).

The examiner notes that Applicant has added the word "monolithically" before the recitation of "formed in one piece" in an attempt to distinguish his invention from Bunch.

Art Unit: 3673

However, it is the examiner's position that Bunch still anticipates the subject matter of claim 9.

Although it is not entirely clear to the examiner what a "head assembly" is, she has consulted both the specification and a dictionary in an attempt to resolve the issue of exactly what the term "head assembly" means.

In his specification, page 3, line 5 of Paragraph No [00012] through page 4, the last line of Paragraph No. [00013], Applicant discloses, as follows:

. . . The outlet portion 108 can comprise e.g. a head assembly 104 with [sic] an integrally formed conduit 105 that is shaped as a bent elbow with respective inlet and outlet portions 105a and 105b, respectively, that extend at an angle X relative to each other. The head assembly 104 also has a coupling structure, described more fully below, for coupling the head assembly to the intake portion 106, and a hose coupling 109 configured for attachment to the vacuum source 102. When the intake portion 106 is attached to the head assembly 104, the intake portion 106 is in direct fluid communication with the inlet portion 105a of the conduit 105, and the intake portion 106 extends at a predetermined angle to the outlet portion 105b of conduit 105. Since the conduit 105 is in fluid communication with the vacuum source 102 and the intake conduit 106, a vacuum applied to the conduit 105 is also communicated with the intake portion 106.

The cleaning device has a pair of handles 110, 112. A rear handle 110 is connected with the head assembly 104. A front handle 112 is connected to a location on the head assembly 104 that is near the junction of the head assembly and the intake portion 106. The handles 110, 112 are preferably formed in one piece with the head assembly 104, but can also be secured to the exterior of the cleaning device by any type of connection device (e.g. the handles can be bolted, strapped or otherwise secured to the cleaning device). Provision of more than one handle enables the cleaning device to be conveniently held by an operator in an advantageous position for cleaning a landscape surface 114, in the manner contemplated by the present invention.

At page 6, in Paragraph No. [00019], the head assembly is also discussed as follows:

Art Unit: 3673

The head assembly 104 is configured to be conveniently coupled to the intake portion 106. The head assembly 104 has an outer skirt 120 that is configured to receive the upper end of the intake portion 106. The outer skirt 120 has slits at select locations, to form the skirt into sections that are flexible enough to be clamped (tightened) against the intake portion. In the figures, a pair of slits 124, 126 are shown in the skirt 120, and cause skirt sections 120a and 120b to be formed in the skirt 120. The skirt sections are flexible enough to be clamped (tightened) against the intake portion. The skirt sections have posts that are formed in one piece with the skirt sections (see e.g. posts 130 in Figures 3, 4) and fasteners such as stove bolts 132 and nuts 134 (Figure 4) that are tightened against the posts 130, to enable the skirt sections to be clamped (tightened) against the intake portion 106.

Merriam-Webster's Collegiate Dictionary, Tenth Edition, Copyright 1997, had no definition of the entire term "head assembly, but defines head as "the end that is upper or higher or opposite the foot" and assembly as "the fitting together of manufactured parts into a complete machine, structure, or unit of a machine". Therefore, it is reasoned that a "head assembly" would be the fitting together of parts into a complete structure that is at the upper or higher end of the device.

Thus, the examiner considers the lid (30) of Bunch to read on Applicant's "head assembly" language. Further, the intake portion (20/18) of Bunch is coupled to its head assembly (30), and the outlet portion (34) appears to be monolithically formed in one piece with the head assembly (30) although there is no explicit disclosure in Bunch as to how the outlet portion (34) and the lid (30) are manufacture (i.e., whether connected together by welding or formed as one-piece as by molding). It would have been obvious to one of ordinary skill in the art at the time the invention was made to form the outlet portion monolithically in one piece with the head assembly whether by welding or casting since it is well established that "the use of a one piece construction instead of

Art Unit: 3673

the structure disclosed in [the prior art] would be merely a matter of obvious engineering choice" (see *In re Larson*, 340 F.2d 965, 968, 144 USPQ 347, 349 (CCPA 1965)).

Further, Applicant has disclosed no criticality as to why the outlet portion must be "monolithically formed in one piece with the head assembly" and has not suggested why an outlet portion that was welded or cast to the head assembly would not work equally as well.

Claims 10 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bunch (U.S. Patent No. 5,655,245), as applied to claim 9 above, and further in view of Whitney (U.S. Patent No. 6,003,195).

As to claim 10, Bunch discloses the device of claim 9 as discussed above, but Bunch fails to explicitly disclose that the outlet portion comprises an elbow shaped conduit monolithically formed in one piece with the head assembly.

Whitney discloses a vacuum generating device which shows the desirability of having a outlet portion which comprises an elbow shaped conduit.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the cleaning device of Bunch so as to have an outlet portion with an elbow shaped conduit as taught by Whitney in order to make it easier to attach a container for holding refuse and debris to be discarded which the operator can drag on wheels behind him or her as he or she is operating the cleaning device.

As to claim 11, Bunch discloses the device of claim 10 as discussed above, and Bunch further discloses at least one handle (48) monolithically formed in one piece with the head assembly (30).

Claims 4-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bunch (U.S. Patent No. 5,655,245), as applied to claims 1 and 2 above, and further in view of Pink (U.S. Patent No. 5,535,479).

As to claims 4, Bunch discloses the device of claim 2 as discussed above, but Bunch fails to explicitly disclose that the angle between the intake portion and the part of the outlet portion is from 75 to 135 degrees.

Pink discloses a portable blower/vacuum handle arrangement wherein the inlet portion (52/46) is at a 90 degree angle from the outlet portion (11) which is well within the range of 75 to 135 degrees.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the cleaning device of Bunch so as to have an angle between the intake portion and a part of the outlet portion be from 75 to 135 degrees in view of Pink in order to make it easier to attach a container for holding refuse and debris to be discarded which the operator can carry around with him or her as he or she is operating the cleaning device.

As to claim 5, Bunch discloses the device of claim 2 as discussed above, but Bunch fails to explicitly disclose that the angle between the intake portion and the part of the outlet portion is from 90 to 105 degrees.

Pink discloses a portable blower/vacuum handle arrangement wherein the inlet portion (52/46) is at a 90 degree angle from the outlet portion (11) which is well within the range of 90 to 105 degrees.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the cleaning device of Bunch so as to have an angle between the intake portion and a part of the outlet portion be from 90 to 105 degrees in view of Pink in order to make it easier to attach a container for holding refuse and debris to be discarded which the operator can carry around with him or her as he or she is operating the cleaning device.

As to claim 6, Bunch discloses the device of claim 1 as discussed above, but Bunch fails to explicitly disclose that the angle between the intake and outlet portions is about 90 degrees.

Pink discloses a portable blower/vacuum handle arrangement wherein the inlet portion (52/46) is at a 90 degree angle from the outlet portion (11).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the cleaning device of Bunch so as to have an angle between the intake portion and a part of the outlet portion be about 90 degrees in view of Pink in order to make it easier to attach a container for holding refuse and debris to be discarded which the operator can carry around with him or her as he or she is operating the cleaning device.

### ***Response to Arguments***

Applicant's arguments filed 31 March 2005 have been fully considered but they are not persuasive.

In response to applicant's argument that the cleaning device of the Bunch reference is not directed to cleaning a landscape surface that is directly exposed to the atmosphere, a recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim. In a claim drawn to a process of making, the intended use must result in a manipulative difference as compared to the prior art. See *In re Casey*, 370 F.2d 576, 152 USPQ 235 (CCPA 1967) and *In re Otto*, 312 F.2d 937, 939, 136 USPQ 458, 459 (CCPA 1963).

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gay Ann Spahn whose telephone number is (571)-272-7731. The examiner can normally be reached on Monday through Thursday, 8:30 am to 7:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Heather C. Shackelford can be reached on (571)-272-7049. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 3673

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Gay Ann Spahn, Patent Examiner  
June 9, 2005



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